APLIKASI *ANALYTIC NETWORK PROCESS* DALAM PENGAMBILAN KEPUTUSAN INVESTASI AREA TAMBANG BATUBARA PT. DARMA HENWA Tbk.

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ABSTRAK

Selama ini penentuan investasi pada area tambang dilakukan dengan mengandalkan insting berdasarkan data yang dimiliki. Dalam penilaian sebuah area tambang melibatkan banyak faktor yang banyak diantaranya saling terkait, sehingga penggunaan insting manusia dianggap kurang dapat menilai kompleksitas dari faktor-faktor pertambangan. MCDM dengan pendekatan ANP digunakan untuk memilih alternatif terbaik dari alternatif area berdasarkan kriteria-kriteria yang disusun melalui FGD.

ANP membantu PT. Darma Henwa Tbk. menganalisis dua area alternatif yang paling berpotensi untuk investasi masa depan: Kintap di Kalimantan Selatan dan Malinau di Kalimantan Timur.

Hasil penelitian dengan menggunakan kuesioner perbandingan berpasangan menunjukkan bahwa Kintap lebih dipilih (59,09% dari skala 100%) dengan kriteria dan sub-kriteria secara keseluruhan. Urutan kontribusi sub-kriteria adalah sebagai berikut Ketersediaan IUP Eksplorasi (16,10%), Akses ke Area Tambang (12,28%), Ketersediaan AMDAL (8,05%), Kemudahan Izin Pembebasan Tanah (8,05%), Jarak dari Pelabuhan ke Mother Vessel (7,34%), Posisi Geografis (6,54%), Jumlah Cadangan (6,51%), Kondisi Sosial Masyarakat (5,99%), Stripping Ratio & Strike Dip (5,59%), Ketersediaan Pelabuhan dan Jarak dari Pit ke Pelabuhan (4,69%), Kualitas Batubara (3,90%), Lokasi Kota Terdekat (3,78%), Jumlah Sumber Daya (3,26%), Jarak Pit ke Jalan Umum (3,22%), Ketersediaan Jalan Hauling (2,35%), Lokasi Desa Terdekat (1,59%), dan Ketersediaan Jalan Survey (0,78%). Index ketidakkonsistenan (*inconsistency index*) penilaian perbandingan berpasangan adalah 0,0544 (kurang dari 0,1), yang berarti bahwa penilaian responden sudah konsisten.

Kata Kunci: ANP, Area Pertambangan Batubara, Investasi, Proses Pengambilan Keputusan.

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APPLICATION OF ANALYTIC NETWORK PROCESS IN COAL MINEAREA INVESTMENT DECISION MAKING PROCESS PT. DARMA HENWA Tbk

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ABSTRACT

The determination of the investment in the mine area is done by relying on decision maker's instinct based on data held. In the assessment of a mining area involves many factors which are interrelated, so the use of human instinct is considered less able to assess the complexity of the factors. MCDM with ANP approach is used to get the best area from the potential alternatives based on the criteria which are developed through focus group discussions.

In this research, ANP is applied to help PT. Darma Henwa Tbk. analyze the two potential areas for near future investment: Kintap in South Kalimantan and Malinau in North Kalimantan.

The result of research using pairwise comparisons questionnaires showed that Kintap is more preferable (59.09% of the scale of 100%) to the overall criteria and sub-criteria. The order of contribution sub-criteria measured are shown in the sub-kriteria Availability of Exploration Permit (16.10%), Access to Mine Area (12.28%), Availability of Environment Analysis (8.05%), Permit Ease of Land Acquisition (8.05%), The Distance from Port to Mother Vessel (7.34%), Geographic Position (6.54%), Reserves (6.51%), The Community Social Condition (5.99%), Stripping Ratio & Strike Dip (5.59%), Port Availability and The Distance from Pit to Port (4.69%), Coal Quality (3.90%), Nearest City (3.78%), Resources (3.26%), The Distance from Pit to Public Roads (3.22%), Existing Hauling Road (2.35%), Nearest Villages (1.59%), and Existing Survey Road (0.78%). The inconsistency index of pairwise comparison assessment was 0.05445 (less than 0.1), which mean that the respondent judgments was done consistently.

Keywords: ANP, Coal Mining Area, Investment, Decision Making Proce